

Cost of capital determination for disclosure year 2025 for information disclosure regulation

For electricity distribution businesses and Wellington International Airport

[2024] NZCC 7

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Associated documents

Publication date	Reference	Title
24 April 2024	ISSN 1178-2560	Cost of capital determination for Wellington International Airport Limited's 2024-2029 price setting event [2024] NZCC 6
13 December 2023	ISBN 978-1-991085-69-6	Cost of capital topic paper, Part 4 Input Methodologies Review 2023 – Final decision
13 December 2023	ISSN 1178-2560	Airport Services Input Methodologies (IM Review 2023) Amendment Determination 2023 [2023] NZCC 34
1 August 2023	ISSN 1178-2560	Cost of capital determination for disclosure year 2024 for information disclosure regulation - For Transpower, gas distribution businesses and suppliers of specified airport services (with a June year-end) [2023] NZCC 20
1 May 2023	ISSN 1178-2560	Cost of capital determination for disclosure year 2024 for information disclosure regulation – Electricity distribution businesses and Wellington International Airport [2023] NZCC 8
17 January 2023	ISBN 978-1-869457-90-7	Guidelines for WACC determinations under the cost of capital input methodologies – Regulation under Part 4 of the Commerce Act 1986 and Part 6 of the Telecommunications Act 2001
2 August 2022	ISSN 1178-2560	Cost of capital determination for disclosure year 2023 for information disclosure regulation – For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end) [2022] NZCC 28
3 May 2022	ISSN 1178-2560	Cost of capital determination for disclosure year 2023 for information disclosure regulation – For Electricity distribution businesses and Wellington International Airport [2022] NZCC 12
2 August 2021	ISSN 1178-2560	Cost of capital determination for disclosure year 2023 for information disclosure regulation– For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end)
30 April 2021	ISSN 1178-2560	Cost of capital determination for disclosure year 2022 – Electricity distribution businesses and Wellington International Airport [2021] NZCC 4

31 July 2020	ISSN 1178-2560	Cost of capital determination for disclosure year 2021 – For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end) [2020] NZCC 15
13 May 2020	ISSN 1178-2560	Cost of capital determination for disclosure year 2021 – Electricity distribution businesses and Wellington International Airport [2020] NZCC 11
25 September 2019	ISSN 1178-2560	Cost of capital determination for electricity distribution businesses' 2020-2025 default price-quality paths and Transpower New Zealand Limited's 2020-2025 individual price-quality path [2019] NZCC 12
31 July 2019	ISSN 1178-2560	Cost of capital determination for disclosure year 2020 for Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end) [2019] NZCC 8
28 September 2012	ISBN 978-1-869452-16-2	Electricity Distribution Services Input Methodologies Determination 2012 [2012] NZCC 26, as amended

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WACC estimates for disclosure year 2025 for EDBs and Wellington Airport

1. This cost of capital determination has been made under the Cost of Capital Input Methodologies (IMs).^{1 2}
2. This determination specifies the weighted average cost of capital (WACC) estimates that will apply for disclosure year 2025 for electricity distribution businesses (EDBs) and Wellington International Airport Limited (WIAL) for information disclosure (ID) regulation.
3. The timing of our WACC determinations for ID regulation differs depending on the disclosure year of the regulated companies. EDBs and WIAL have disclosure year of 1 April to 31 March, with disclosure year 2025 being the year ending 31 March 2025.³
4. Vanilla and post-tax WACC estimates for disclosure year 2025 for EDBs and WIAL are summarised in Table 1 and Table 2 below, respectively.

Table 1: Summary of vanilla and post-tax WACC estimates for EDBs (%)

	Vanilla WACC	Post-tax WACC
Mid-point	6.90%	6.18%
25 th percentile	6.22%	5.50%
67 th percentile	7.34%	6.62%
75 th percentile	7.58%	6.86%

Table 2: Summary of vanilla and post-tax WACC estimates for WIAL (%)

	Vanilla WACC	Post-tax WACC
Mid-point	8.56%	8.18%

5. Further detail regarding the parameter values used to generate these WACC estimates is contained in paragraphs 8 to 20 below. The WACC estimates have been calculated as at 1 April 2024, which is the first day of disclosure year 2025.
6. This determination applies the IMs, including any applicable amendments to the IMs made as a result of the review of the IMs made under Part 4 of the Commerce Act

¹ Commerce Commission, Electricity Distribution Services Input Methodologies Determination 2012 [2012] NZCC 26 (as amended). An unofficial consolidated version incorporating amendments to the determination is [available on the Commission's website](#).

² Commerce Commission, [Airport Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023](#) [2023] NZCC 34 (December 2023).

³ We determine an ID WACC for Auckland International Airport Limited and Christchurch International Airport Limited (AIAL and CIAL) in July as their disclosure year is 1 July to 30 June.

1986 (Part 4 IM Review 2023).^{4 5} The IMs set out the methodology for determining an estimate of the WACC, including:

- 6.1 the formulas used (including for different WACC percentiles);
 - 6.2 the values for WACC parameters which are fixed under the IMs; and
 - 6.3 our methodology for determining the risk-free rate and average debt premium.
7. The Part 4 IM Review 2023 resulted in changes to some fixed WACC parameters, including leverage, asset beta and equity beta. For EDBs, these new parameters will apply for ID regulation from the commencement of disclosure year 2026,⁶ while for airports the WACC changes have applied from 14 December 2023.⁷

⁴ Commerce Commission, Electricity Distribution Services Input Methodologies Determination 2012 [2012] NZCC 26 (as amended). An unofficial consolidated version incorporating amendments to the determination is [available on the Commission's website](#).

⁵ Commerce Commission, [Airport Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023](#) [2023] NZCC 34 (December 2023).

⁶ Commerce Commission, Electricity Distribution Services Input Methodologies (IM Review 2023) Amendment Determination 2023 [2023] NZCC 35 (December 2023), clause 4(b)(i).

⁷ Commerce Commission, [Airport Services Input Methodologies \(IM Review 2023\) Amendment Determination 2023](#) [2023] NZCC 34 (December 2023), clause 4(c)(iv).

Further details regarding the WACC estimates

WACC parameter values for EDBs and WIAL

8. The parameter values used to generate the mid-point WACC estimates for disclosure year 2025 for EDBs and WIAL are summarised in Table 3 below.⁸

Table 3: Values used to calculate WACC estimates for EDBs and WIAL*

Parameter	EDBs	WIAL
Risk-free rate	4.53%	4.53%
Average debt premium	1.39%	1.18%
Leverage	42%	23%
Asset beta	0.35	0.67
Equity beta	0.60	0.87
Tax adjusted market risk premium	7.0%	7.0%
Average corporate tax rate	28%	28%
Average investor tax rate	28%	28%
Debt issuance costs	0.2%	0.2%
Cost of debt	6.12%	5.91%
Cost of equity	7.46%	9.35%
Standard error of midpoint WACC estimate	0.0101	0.0169
Mid-point vanilla WACC	6.90%	8.56%
Mid-point post-tax WACC	6.18%	8.18%

*The numbers are rounded to two decimal points, except for the debt issuance costs, tax adjusted market risk premium and standard error of the mid-point WACC estimate

Risk-free rate for EDBs and WIAL

9. The risk-free rate reflects the estimated bid yield to maturity on New Zealand government bonds with a term to maturity equal to the length of the regulatory period (and five years for airports).
10. Our estimate of the five-year risk-free rate is based on data reported by Bloomberg for the three-month period ending 31 March 2024 in respect of the May 2028 and April 2029 maturity bonds.
11. The daily data reported by Bloomberg is linearly interpolated, annualised (to reflect the six-monthly payment of interest) and averaged to produce the estimate of 4.53%

⁸ All parameter values except the estimate of the risk-free rate and the average debt premium are set in the IMs.

interest rate on New Zealand government bonds with a five-year term to maturity, as estimated at 1 April 2024.⁹

Average debt premium for EDBs

12. The average debt premium for EDBs of 1.39% is the average of the debt premium values for the current debt premium reference year (DPRY) and the four previous DPRYs, as shown in Table 4 below.
13. The DPRY for EDBs starts on 1 September and ends on 31 August.¹⁰ DPRY 2024 is the current DPRY for EDBs as it contains the start of disclosure year 2025 (1 April 2024). The EDB IMs state that the calculation of the debt premium for a DPRY is estimated for each business day in the 12 months preceding the start of the DPRY.

Table 4: Average debt premium for EDBs (%)

	DPRY 2020	DPRY 2021	DPRY 2022	DPRY 2023	DPRY 2024	Average
Debt premium	1.60	1.55	1.15	1.25	1.40	1.39

14. The debt premium values are taken from the following sources:
 - 14.1 The debt premium value for the 2020 DPRY was estimated in the ID WACC determination published on 13 May 2020 for EDBs and WIAL.¹¹
 - 14.2 The debt premium value for the 2021 DPRY was estimated in the ID WACC determination published on 30 April 2021 for EDBs and WIAL.¹²
 - 14.3 The debt premium value for the 2022 DPRY was estimated in the ID WACC determination published on 3 May 2022 for EDBs and WIAL.¹³
 - 14.4 The debt premium value for the 2023 DPRY was estimated in the ID WACC determination published on 1 May 2023 for EDBs and WIAL.¹⁴

⁹ We interpolate between the two closest bonds surrounding a five-year remaining term. This requires taking the yields of the bonds with a remaining term immediately before and after a five-years term to maturity on that day. The target term to maturity is constant but the bonds' remaining terms to maturity decrease over time so the bonds immediately before and after the target term may change over time.

¹⁰ For example, DPRY 2024 for EDBs is 1 September 2023 to 31 August 2024.

¹¹ Commerce Commission, [Cost of capital determination for disclosure year 2021 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2020] NZCC 11.

¹² Commerce Commission, [Cost of capital determination for disclosure year 2022 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2021] NZCC 4.

¹³ Commerce Commission, [Cost of capital determination for disclosure year 2023 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2022] NZCC 12.

¹⁴ Commerce Commission, [Cost of capital determination for disclosure year 2024 for information disclosure regulation. Electricity distribution businesses and Wellington International Airport](#) [2023] NZCC 8.

15. We have estimated a debt premium of 1.40% for the 2024 DPRY based on the data in Table 5 below.
 - 15.1 We have had greatest regard to the category (a) bonds, which support a debt premium of approximately 1.40%, which matches the target sector and credit rating, with a very similar remaining term to maturity (4.7 years).
 - 15.2 The estimated debt premium for other issuers in bond categories (b) to (e) are not inconsistent with a debt premium around 1.40%, when consideration is given to the different credit ratings and term to maturity (refer to the commentary column of Table 5 for details).
 - 15.3 The Nelson-Siegel-Svensson (NSS) estimate of the debt premium of 1.35% also supports our estimate of 1.40%.

Table 5: Debt premium estimate for EDB DPRY 2024

	Sector	100% Govt owned	Bond credit rating	Remaining term to maturity (years)	Debt premium (%)
Benchmark bond	EDB/GPB	No	BBB+	5.0	1.40

Bond category	Issuer	Sector	100% Govt owned	Bond credit rating	Remaining term to maturity (years)	Debt premium (%)	Comments
a	Vector Limited	EDB/GPB	No	BBB+	4.7	1.39	5-year debt premium would be higher.
b	Genesis Energy Limited	Other	No	BBB+	5.0	1.40	Credit rating and term are an exact match.
b	Mercury NZ Limited	Other	No	BBB+	5.0	1.37	Credit rating and term are an exact match.
b	Meridian Energy Limited	Other	No	BBB+	2.3	1.13	5-year debt premium would be higher.
d	Auckland International Airport Limited	Airport	No	A-	5.1	1.13	BBB+ debt premium would be higher; 5-year debt premium would be lower.
d	Chorus Limited	Fibre	No	BBB	4.7	1.35	BBB+ debt premium would be lower; 5-year debt premium would be higher.
d	Contact Energy Limited	Other	No	BBB	5.1	1.37	BBB+ debt premium would be lower; 5-year debt premium would be lower.
d	Fonterra Co-operative Group Limited	Other	No	A-	2.7	1.08	BBB+ debt premium would be higher; 5-year debt premium would be higher.
d	Spark Finance Limited	Telco	No	A-	5.0	1.09	BBB+ debt premium would be higher.
d	Wellington International Airport Limited	Airport	No	BBB	3.4	1.61	BBB+ debt premium would be lower; 5-year debt premium would be higher.
e	Christchurch International Airport Limited	Airport	Yes	A-	5.2	1.32	BBB+ debt premium would be higher; 5-year debt premium would be lower.
e	Transpower New Zealand Limited	Other	Yes	AA-	5.0	0.78	BBB+ debt premium would be higher.

Notes on bonds analysed

1	VCTNZ 3.69 11/26/27
2	GENEPO 4.17 03/14/28; GENEPO 5 04/03/25; GENEPO 3.65 12/20/28
3	MCYNZ 1.56 09/14/27; MCYNZ 2.16 09/29/26; MCYNZ 1.917 10/09/30
4	MERINZ 4.21 06/27/25
5	AIANZ 5.67 05/09/28
6	CNUNZ 1.98 12/02/27
7	CENNZ 5.82 04/11/28
8	FCGNZ 4.15 11/14/25
9	SPKNZ 3.94 09/07/26; SPKNZ 4.37 09/29/28
10	WIANZ 2 1/2 08/14/26
11	CHRINT 5.18 05/19/28
12	TPNZ 5.893 03/15/28

WACC range and 67th percentile estimate for EDBs

16. In addition to the mid-point estimate, we are also required to determine a WACC range and 67th percentile estimate for each EDB disclosure year.
17. The WACC range means the values falling between the 25th percentile and 75th percentile, inclusive of the mid-point estimate of WACC. The methodology for estimating different WACC percentiles is set out in clause 2.4.5 of the EDB IMs.¹⁵

Average debt premium for WIAL

18. The average debt premium for WIAL of 1.18% is the average of the debt premium values for the current DPRY and the four previous DPRYs, as shown in Table 6 below.
19. The DPRY for WIAL starts on 1 July and ends on 30 June.¹⁶ DPRY 2024 is the current DPRY for WIAL as it contains the start of disclosure year 2025 (1 April 2024). The IMs state that the calculation of the debt premium for a DPRY is estimated for each business day in the 12 months preceding the start of the DPRY.
20. The debt premium values for the 2020 to 2024 DPRYs are the same debt premium values that we previously determined for AIAL and CIAL from the following sources:
 - 20.1 The debt premium value for the 2020 DPRY was estimated in the ID WACC determination published on 31 July 2019 for Transpower, gas pipeline business (GPBs) and airports.¹⁷
 - 20.2 The debt premium value for the 2021 DPRY was estimated in the ID WACC determination published on 31 July 2020 for Transpower, GPBs and airports.¹⁸
 - 20.3 The debt premium value for the 2022 DPRY was estimated in the ID WACC determination published on 2 August 2021 for Transpower, GPBs and airports.¹⁹

¹⁵ The same methodology applies to both vanilla and post-tax WACC estimates. The mid-point estimate of WACC is treated as the 50th percentile. The required estimates are set out in Table 1.

¹⁶ For example, DPRY 2024 for WIAL is 1 July 2023 to 30 June 2024.

¹⁷ Commerce Commission, [Cost of capital determination for disclosure year 2020 For Transpower, gas pipeline businesses and suppliers of specified airport services \(with a June year-end\)](#) [2019] NZCC 8 (31 July 2019).

¹⁸ Commerce Commission, [Cost of capital determination for disclosure year 2021 For Transpower, gas pipeline businesses and suppliers of specified airport services \(with a June year-end\)](#) [2020] NZCC 15 (31 July 2020).

¹⁹ Commerce Commission, [Cost of capital determination for disclosure year 2022 for information disclosure regulation For Transpower, gas pipeline businesses and suppliers of specified airport services \(with a June year-end\)](#) [2021] NZCC 10 (2 August 2021).

20.4 The debt premium value for the 2023 DPRY was estimated in the ID WACC determination published on 2 August 2022 for Transpower, GPBs and airports.²⁰

20.5 The debt premium value for the 2024 DPRY was estimated in the ID WACC determination published on 1 August 2023 for Transpower, GPBs and airports.²¹

Table 6: Average debt premium for WIAL (%)

	DPRY 2020	DPRY 2021	DPRY 2022	DPRY 2023	DPRY 2024	Average
Debt premium	1.30	1.30	1.10	1.00	1.20	1.18

²⁰ Commerce Commission, [Cost of capital determination for disclosure year 2023 for information disclosure regulation For Transpower, gas pipeline businesses and suppliers of specified airport services \(with a June year-end\)](#) [2022] NZCC 28 (2 August 2022).

²¹ Commerce Commission, [Cost of capital determination for disclosure year 2024 for information disclosure regulation For Transpower, gas distribution businesses and suppliers of specified airport services \(with a June year-end\)](#) [2023] NZCC 20 (1 August 2023).

Changes in the risk-free rate and debt premium over time

21. The IMs for regulated services (including for EDBs and WIAL) reflect that both the risk-free rate and the debt premium on bonds change over time. Figure 1 shows, as at 1 April 2024, changes over time in:

- 21.1 The five-year risk-free rate;
- 21.2 The estimated debt premium on bonds rated BBB+ with a remaining term to maturity of five years; and
- 21.3 The estimated debt premium on bonds rated A- with a remaining term to maturity of five years.

Figure 1: Changes in the risk-free rate and estimated debt premium over time

